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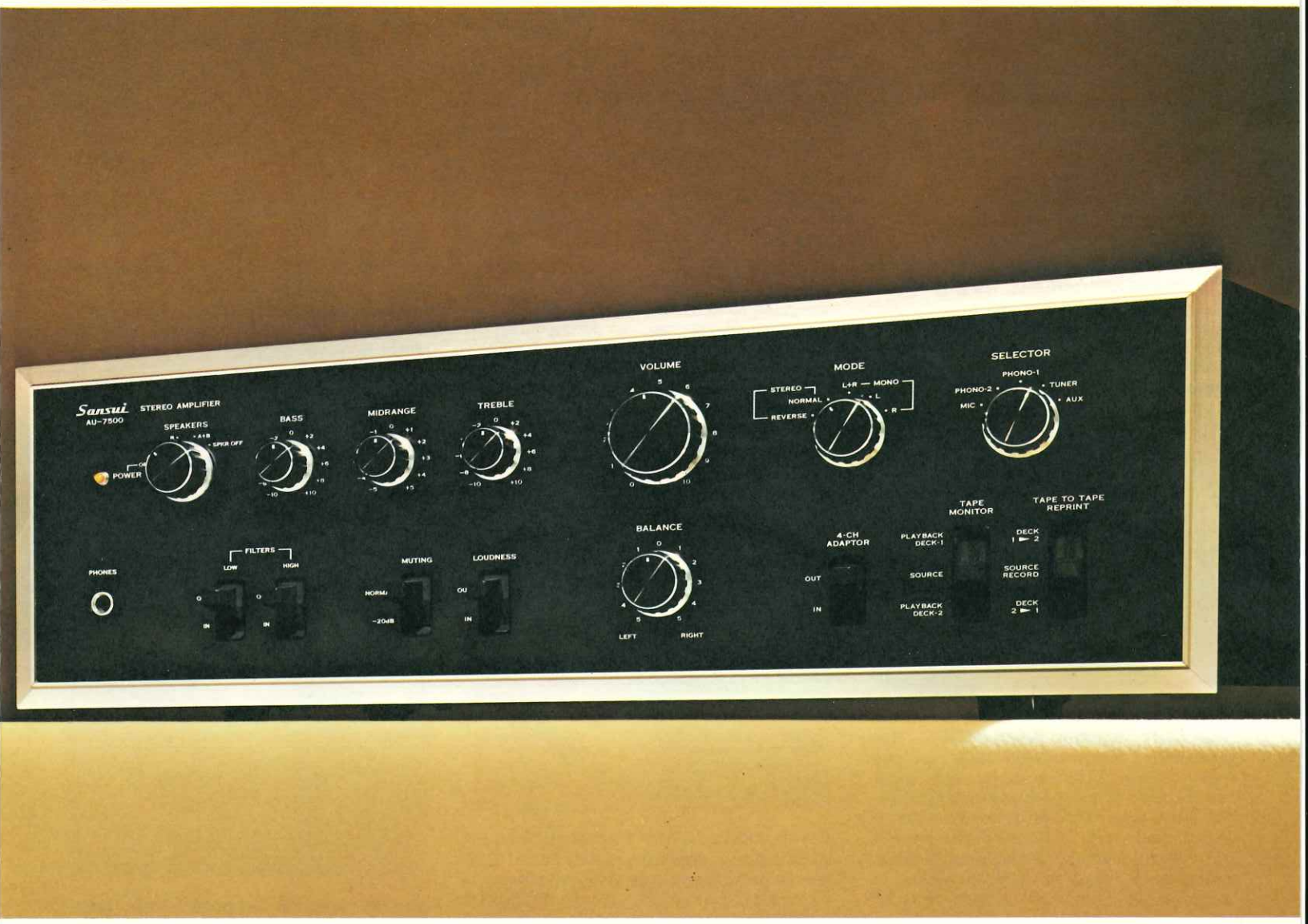
SANSUI AU7500

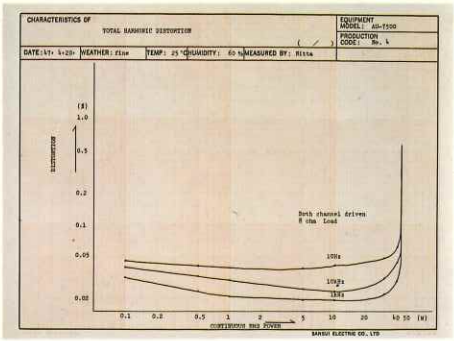


SOLID STATE INTEGRATED AMPLIFIER This professional stereo component, an integrated amplifier with unusually wide power bandwidth, says a lot about the way Japan's foremost audio-only specialist meets the requirements of the stereo world today. A dramatic combination of professional capability and tonal quality, the AU-7500 represents a significant milestone in Sansui's pursuit of excel lence. Not only is this product the most advanced of any 2-channel products ever made by Sansui, it also represents the pinnacle of the company's up-to-the-minute knowledge of audio acoustics and electronics. The AU-7500 boasts such performance characteristics as total harmonic distortion and intermodulation distortion which has been limited to below 0.1% throughout the audio spectrum and well beyond. With its super-wide power bandwidth of 5—40,000Hz, you can achieve RMS power of 43 watts into 8 ohms, along with total harmonic distortion of only 0.1%. Inside the AU-7500 are a PNP-NPN-PNP heterojunction three-stage direct-coupled equalizer amplifier with an input capacity of no less than 300mV RMS resulting in such a wide dynamic range. There are also low-noise PNP transistor tone contral circuits and a direct-coupled OCL pure complementary power amplifier employing two 6,800μF jumbo power supply capacitors. Finally, this professional amplifier is blessed with a variety of convenience features, including a 4-channel adaptor switch, the ability to connect up to three tape decks, and provisions for tape-to-tape dubbing. And in terms of tonal quality, the AU-7500 quite simply has no equal.

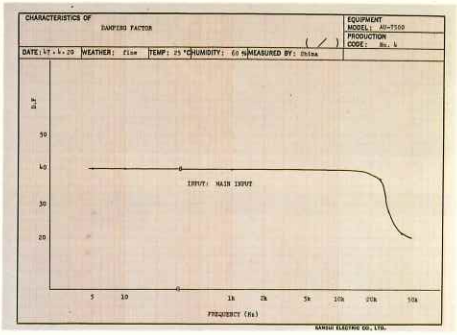
Sansui

A dramatic combination of professional capability and tonal quality: Sansui's AU-7500.

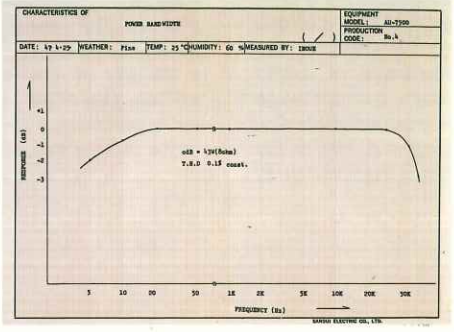
0.1% DISTORTION OVER AND BEYOND THE AUDIO SPECTRUM: The graph below tells all. Both total harmonic distortion and intermodulation distortion of the AU-7500 stay below 0.1% and well beyond the entire audio spectrum. Look closely and discover that our claim of 0.1% is even quite moderate.



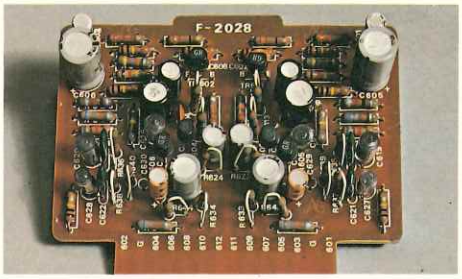
DIRECT-COUPLED OCL PURE COMPLEMENTARY POWER AMPLIFIER: The completely direct-coupled OCL (output-capacitor-less) pure complementary amplifier is driven by two (plus and minus) powerful, stable power supplies from two 6,800μF jumbo capacitors. This amplifier permits negative feedback to be evenly applied from the DC range on up to the super highs. As the graph below indicates, its damping factor is perfectly flat all the way to the deep low frequencies, which helps in reducing the irregular movement of the speaker cones to an unprecedented degree. In the important differential amplifier, selected low-noise silicon transistors and ripple filters work together to create extremely high stability. Combined with the NPN-PNP power transistors of matched properties, it dramatically suppresses the switching distortion that often occurs near the crossover point, while at the same time drastically limiting distortion that tends to increase when the input is of very low-amplitude signals.

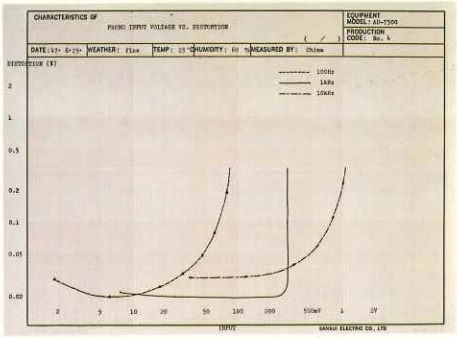

CHARACTERISTICS OF
DAMPING FACTOR
EQUIPMENT MODEL: AU-7500
PRODUCTION CODE: No. 4
DATE: 47-4-25 WEATHER: fine TEMP: 25 °C HUMIDITY: 60 % MEASURED BY: Ohkawa
INPUT: MAIN INPUT
FREQUENCY (Hz)
SANSUI ELECTRIC CO., LTD.

5—40,000Hz POWER BANDWIDTH: Even at peak power, delivering its 43 watts of RMS power per channel into 8 ohms with total harmonic distortion of 0.1%, the AU-7500's output power bandwidth is an incredible 5Hz to double the upper limit of the audible frequency range—40,000Hz. Coupled with the exceptional dynamic performances described below in this brochure, these power characteristics are indicative of the quality this amplifier consistently delivers.

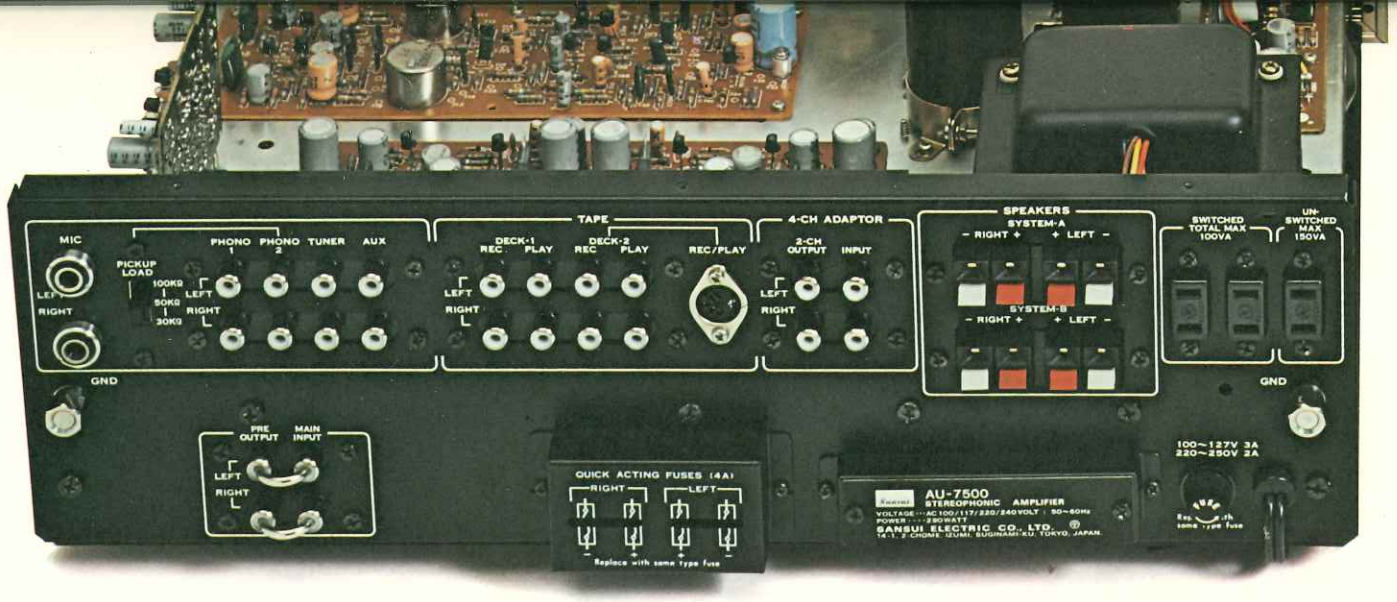

CHARACTERISTICS OF
POWER BAND-WIDTH
EQUIPMENT MODEL: AU-7500
PRODUCTION CODE: No.4
DATE: 47-4-25 WEATHER: Fine TEMP: 25 °C HUMIDITY: 60 % MEASURED BY: IMOUE
FREQUENCY (Hz)
SANSUI ELECTRIC CO., LTD.

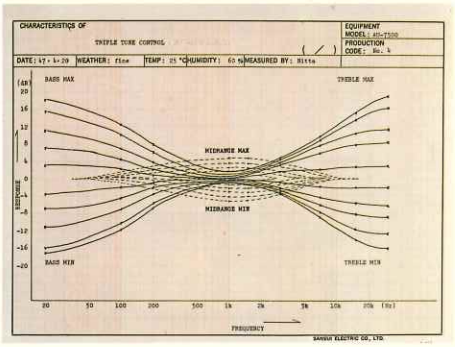
DIRECT-COUPLED 3-STAGE EQUALIZER WITH WIDE DYNAMIC RANGE AND 300mV RMS PHONO INPUT CAPACITY: A high 44V DC voltage is applied to the PNP-NPN-PNP heterojunction three-stage direct-coupled equalizer amplifier. The latter draws power from a specially stabilized power supply and accepts up to 300mV RMS in phono input with ease, giving an unprecedented wide dynamic range.



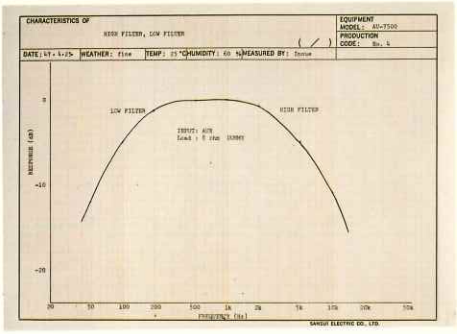


LOW-NOISE TONE CONTROL AMPLIFIER: From its first stage to its output stage, the tone control amplifier exclusively employs select low-noise silicon transistors for low distortion, a high signal-to-noise ratio and wide response. For perfect control effects, it is equipped with Sansui's unique Triple Tone Controls, permitting you a midrange control in addition to the conventional bass and treble controls. The bass and treble controls are set in click stops of 3dB each and are adjustable within ±15dB, while the midrange is adjustable ±5dB in steps of 1dB each. With the controls set at center, the amplifier provides a completely flat response.





12dB/OCT. HIGH AND LOW FILTERS: Sharp-cutting 12dB/oct. negative feedback type high and low filters are provided on the AU-7500 to eliminate common low-frequency noise (such as turntable motor rumble) and high-frequency noise (such as scratch noise from a worn record).



4-CHANNEL ADAPTOR TERMINALS & SWITCH: The AU-7500 is ready for 4-channel when you are. Special facilities are provided on the amplifier to connect and control a 4-channel adaptor so you don't have to sacrifice tape monitor jacks as you have to do with many stereo amplifiers. Pushing down the lever switch activates the 4-channel adaptor. And if desired, a tape deck may also be connected to those jacks.

TWO TAPE MONITOR AND TWO PHONO INPUT CIRCUITS: The AU-7500 features two tape monitor circuits so that you may connect up to two tape decks simultaneously —and then record or reproduce on either deck with the simple changeover of a front-panel switch, or record into both simultaneously. There is also a tape-to-tape reprint switch on the front panel that allows a recorded tape to be copied from one deck to another, and vice versa. If you choose not to connect a 4-channel adaptor, you may connect a third tape deck to the 4-channel adaptor jack. Then there are also two phono input circuits—one with impedance of 50kΩ, the other switchable between 30kΩ, 50kΩ and 100kΩ to let you use a wide variety of cartridges.

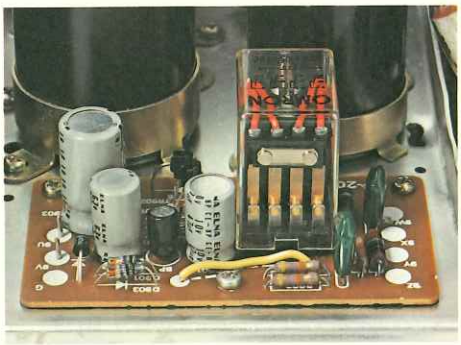
LEFT, RIGHT MICROPHONE JACKS: Two microphone jacks on the AU-7500 are designed to connect the expensive 50kΩ high-impedance type microphones for stereo recording. Furthermore, the jacks are the equally expensive communications type.

Sansui SDM-2 Dynamic Microphone available as an optional extra.

PRE- AND POWER AMPLIFIERS SEPARABLE: The preamplifier and power amplifier sections may be separated for independent use simply by unplugging the jumper connectors. You'll discover the convenience of this feature if you ever choose to upgrade your system by introducing the multi-amplifier electronic crossover system, among other uses.

CONNECTS TWO PAIRS OF SPEAKER SYSTEMS: You can connect up to two pairs of speaker systems with the AU-7500, and drive them either separately or simultaneously—or cut them both off—by a front-panel control.

COMPLETE PROTECTION CIRCUIT: The AU-7500 employs a newly-designed protection circuit utilizing three transistors, six diodes and a relay to protect the vital power transistors and your speaker systems in the event speaker terminals are accidentally shorted or other abnormal conditions occur. Even greater protection is afforded by four quick-acting fuses. The protection circuit also serves as an automatic muting circuit, to switch the speaker output circuit off for a few seconds immediately after the amplifier is turn on, thus cutting out the unpleasant pop noise.



OTHER CONVENIENCE FEATURES:

1) An audio muting switch reduces volume by −20dB over the entire frequency range.
2) A loudness switch is included to compensate lows and highs at low listening levels.
3) A convenient mode switch lets you select STEREO, REVERSE, MONO L+R, MONO L, MONO R.
4) A DIN connector socket simplifies tape deck connections.
5) Headphono jack.
6) Three AC outlets are provided, two of which are controlled by the power switch.
7) Two large ground terminals.

SPECIFICATIONS

POWER OUTPUT	
IHF MUSIC POWER	150W (4Ω) at 1,000Hz
CONTINUOUS POWER (each channel driven)	43/43W (8Ω) at 1,000Hz
CONTINUOUS POWER (both channels driven)	40+40W (8Ω) at 1,000Hz
CONTINUOUS POWER (both channels driven at rated distortion 20 to 20,000Hz)	32+32W (8Ω)
TOTAL HARMONIC DISTORTION (at rated output)	
POWER AMPLIFIER ONLY	less than 0.1%
INTERMODULATION DISTORTION (70Hz: 7,000Hz=4:1 SMPTE method)	
POWER AMPLIFIER ONLY	less than 0.1%
IHF POWER BANDWIDTH (each channel driven at 8Ω)	5 to 40,000Hz
FREQUENCY RESPONSE (at 1W power output)	
PHONO-1 AND -2	RIAA equalization curve ±0.5dB (30 to 15,000Hz)
OVERALL (from **AUX**)	10 to 30,000Hz ±1.0dB
POWER AMPLIFIER ONLY	10 to 50,000Hz ±1.0dB
LOAD IMPEDANCE	4 to 16Ω
DAMPING FACTOR	approximately 40 at 8Ω load
RATED INPUT SENSITIVITY AND IMPEDANCE (at 1,000Hz)	
PHONO-1	2.5mV (50kΩ)
PHONO-2	2.5mV (30kΩ, 50kΩ, 100kΩ)
Maximum input capacity	300mV (THD: less than 0.5%)
MIC	2.5mV (50kΩ)
TUNER	100mV (50kΩ)
AUX	100mV (50kΩ)
TAPE MONITOR-1 (Pin)	100mV (50kΩ)
TAPE MONITOR-2 (Pin)	100mV (50kΩ)
TAPE MONITOR-2 (DIN)	100mV (50kΩ)
4-CH ADAPTOR	100mV (50kΩ)
POWER AMPLIFIER ONLY	800mV (40kΩ)
RATED OUTPUT VOLTAGE AND IMPEDANCE (at 1,000Hz)	
TAPE REC-1 (Pin)	100mV
TAPE REC-2 (Pin)	100mV
TAPE REC-2 (DIN)	30mV
4-CH ADAPTOR	100mV
PREAMPLIFIER	0.8V (THD: less than 0.08%)
(Maximum Output Voltage)	4.0V (THD: less than 0.5%)
CROSSTALK (at 1,000Hz, rated output)	
PHONO-1	better than 50dB
PHONO-2	better than 50dB
MIC	better than 50dB
TUNER	better than 50dB
AUX	better than 50dB
POWER AMPLIFIER ONLY	better than 65dB
IHF HUM AND NOISE	
PHONO-1	better than 75dB
PHONO-2	better than 75dB
MIC	better than 75dB
TUNER	better than 80dB
AUX	better than 80dB
POWER AMPLIFIER ONLY	better than 100dB

CONTROLS	
BASS	+15dB, −15dB at 50Hz
MIDRANGE	+5dB, −5dB at 1,500Hz
TREBLE	+15dB, −15dB at 15,000Hz
LOUDNESS	+10dB, at 50Hz, +10dB at 15,000Hz
LOW FILTER	−12dB at 50Hz (12dB/oct)
HIGH FILTER	−11dB at 10,000Hz (12dB/oct.)
SWITCHES	
SELECTOR	MIC. PHONO-1. PHONO-2. TUNER. AUX
MODE	STEREO-REVERSE. STEREO-NORMAL. MONO-L+R MONO-L. MONO-R
TAPE MONITOR	PLAYBACK DECK-1. SOURCE. PLAYBACK DECK-2
TAPE TO TAPE REPRINT	DECK-1 to 2. SOURCE RECORD. DECK-2 to 1
MUTING	NORMAL. −20dB
LOUDNESS	OUT, IN
LOW FILTER	OUT, IN
HIGH FILTER	OUT, IN
4-CH. ADAPTOR	OUT, IN
SPEAKER SELECTOR	POWER OFF. A. B. A+B. SPKR-OFF
SEMICONDUCTORS	Transistors: 38 Diodes: 15 Zener Diode: 1
POWER REQUIREMENTS	100 110 117 127 220 230 240 250V 50/60Hz
POWER CONSUMPTION	
MAXIMUM CONSUMPTION	315VA
RATED CONSUMPTION	100W
DIMENSIONS	140mm (5 9/16″)H×440mm (17 3/8″)W ×322mm (12 11/16″)D
WEIGHT	12.7kg (28.0 lbs.)

Design and specifications subject to change without notice for improvements.

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